UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,012	03/08/2006	Frank Cuttitta	31978-228047	4600
	7590 10/01/200 ISTITUTES OF HEAL		EXAMINER	
C/O VENABLE LLP			PAGONAKIS, ANNA	
P. O. BOX 34385 WASHINGTON, DC 20043-9998			ART UNIT	PAPER NUMBER
	,		1614	
			MAIL DATE	DELIVERY MODE
			10/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/571,012	CUTTITTA ET AL.				
Office Action Summary	Examiner	Art Unit				
	ANNA PAGONAKIS	1614				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence add	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	-· action is non-final.					
<i>;</i> —		secution as to the	morite ie			
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under L	x parte quayre, 1955 C.D. 11, 40	. O. O. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-75</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrav	vn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-75</u> are subject to restriction and/or e	election requirement					
Olami(3) 1-10 are subject to restriction and/or e	nection requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) acce		Examiner.				
	• •					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
The dath of declaration is objected to by the Ex	anniner. Note the attached Office	Action of formal 1	0-102.			
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list of the priorical statement.</li> </ul>	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National :	Stage			
Attachment(s)  1) \[ \sum \text{Notice of References Cited (PTO-892)} \] 2) \[ \sum \text{Notice of Draftsperson's Patent Drawing Review (PTO-948)} \]	4)					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal Pa					
Paper No(s)/Mail Date	6)					

Application/Control Number: 10/571,012 Page 2

Art Unit: 1614

#### **DETAILED ACTION**

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

# Lack of Unity - Fifteen Groups of Claims

Group I, claims 1-10, drawn to a complex comprising a compound of one of formula I-VII, XII or XIII, in association with an adrenomedullin (AM) peptide.

Group II, claims 11-16, drawn to a method for inhibiting an activity of an AM peptide, comprising contacting the peptide with an effective amount of a compound of one of formula I-VII.

Group III, claims 17-19, 26-28, drawn to a method for treating a condition that is mediated by over-expression and/or activity of AM, comprising administering to a patient in need of such treatment an effective amount of a compound of one of formula I-VII, as defined in claim 1.

Group IV, claims 20-25, drawn to a method for stimulating an activity of AM peptide, comprising contacting the peptide with an effective amount of a compound of one of one of formula VIII, XII or XIII, as defined in claim 1.

Group V, claims 29-34, 29-43, drawn to a method for inhibiting an activity of a GRP peptide, comprising contacting the peptide with an effective amount of a compound of formula XIV or XVI, as defined in claim 5.

Group VI, claims 35-37, drawn to a method for treating a condition that is mediated by over-expression and/or activity of GRP, comprising administering to a patient in need of such treatment an effective amount of a compound of formula XIV or XVI, as defined in claim 5.

Group VII, claims 44-46, drawn to a method for treating a condition that is mediated by under-expression and/or activity of GRP, and/or that would benefit from increased expression of GRP comprising administering to a patient in need of such treatment an effective amount of a compound of formula XVII, as defined in claim 5.

Group VIII, claims 47-48, drawn to a method for detecting an AM peptide.

Group IX, claims 49-52, drawn to a method for detecting a GRP peptide.

Art Unit: 1614

Group X, claims 53-58, drawn to a kit suitable for treating a subject suffering from a condition mediated by aberrant expression and/or activity of adrenomedullin (AM).

Group XI, claims 59-61, drawn to a kit suitable for detecting a GRP peptide.

Group XII, claim 62, drawn to a method for inhibiting GRP-mediated angiogenesis.

Group XIV, claim 63, 65-73, drawn to a method for preventing or treating condition mediated by GRP-mediated angiogenesis in a subject in need of such treatment, comprising administering to the subject an effective amount of an agent that inhibits GRP.

Group XV, claims 64, drawn to a method for preventing or treating an angiogenesis-mediated conditions.

Group XVI, claims 74-75, drawn to a method for treating low blood pressure or an eating disorder in a subject in need of such treatment.

The inventions listed as Groups I-XVI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature for the following reasons: a special technical feature is absent given that the compounds claimed are not novel (Looker et al, provided by Applicant). Therefore, a lack of unity of invention is proper.

### **Election of Specie Requirement**

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1. Specifically, with the election of Groups I-XVI, applicant is required to elect:

one compound (see instant claims 1-2, 5-6, 9-12, 17-18, 20-21, 26-27, 29-30, 35-36, 39, 45, 47-50, 53-60, 66-75)

With the election of Groups II, III, V-VII, XV:

one disease (see instant claim 16, 19, 24-25, 28, 33-34, 37, 42-43, 64)

Art Unit: 1614

If applicant elects a specie from the above specie election which is not found in the instant disclosure as filed, specie election may be considered new matter. Additionally, applicant is required to provide a chemical structure of the elected compound as well as to **specify** precisely where the elected compound can be found in the instant disclosure.

Each compound has a totally different structure and thus different reactivity, binding affinity, mechanism, stability, polarity, bioavailability, efficacy, solubility and modes of action. Furthermore, the search for one specie will not lead to information regarding another, and vice versa. Because these inventions are distinct for the reasons given above and the search required for one species is not required for another, the restriction requirement is deemed proper.

Each disease has a different and distinct etiology and pathophysiological manifestations, and that each is differently treated. Such is sufficient to indicate that each of the methods of treating the presently claimed disease states is differently searched in the patent and non-patent literature and that a search for one disease will not necessarily result in a comprehensive search of any one or more of the other diseases listed. As a result, an undue burden would be placed on the Examiner to search each of Applicant's presently claimed species. MPEP 809.02(d) states "[w]here only generic claims are presented, no restriction can be required except in those applications where the generic claims recite such a multiplicity of species that an unduly extensive and burdensome search would be necessary if all the claimed species were to be examined simultaneously.

Applicant is required, to reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Art Unit: 1614

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitation of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicated which are readable upon the elected species. MPEP 809.02(a).

Applicant is advised that a reply to this requirement may to be complete must include (i) an election of a species or invention to be examined even though the requirement is traversed (37 CFR 1.143) and (ii) the identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a fight to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election with traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

## **Inventorship Notice**

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors of at least one claim remaining in the application. Any amendment of

Application/Control Number: 10/571,012 Page 6

Art Unit: 1614

inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.170).

### **Rejoinder Notice**

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. <u>All</u> claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNA PAGONAKIS whose telephone number is (571)270-3505. The examiner can normally be reached on Monday thru Thursday, 9am to 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP

/Ardin Marschel/ Supervisory Patent Examiner, Art Unit 1614